

OPERATOR'S MANUAL FOR LOW PROFILE 12,000 RPM 5 in. (127 mm) and 6 in. (150 mm)



WARNING

Always wear safety goggles to protect your eyes.



OIL DAILY

Oil daily for superior Performance.

Operators Instructions

Includes - Product Highlights and Suggested Applications, Specifications, Please Read and Comply, Assembly Drawing of Machines, Parts List, Proper Use of Tool, Work Stations, Putting the Tool into Service, Operating Instructions.

Important

Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible location.

Specifications

Air Consumption
Maximum
Horsepower

17 SCFM @ 90 PSI
12,000 RPM
.28 HP

Air Inlet
Recommended Hose Size

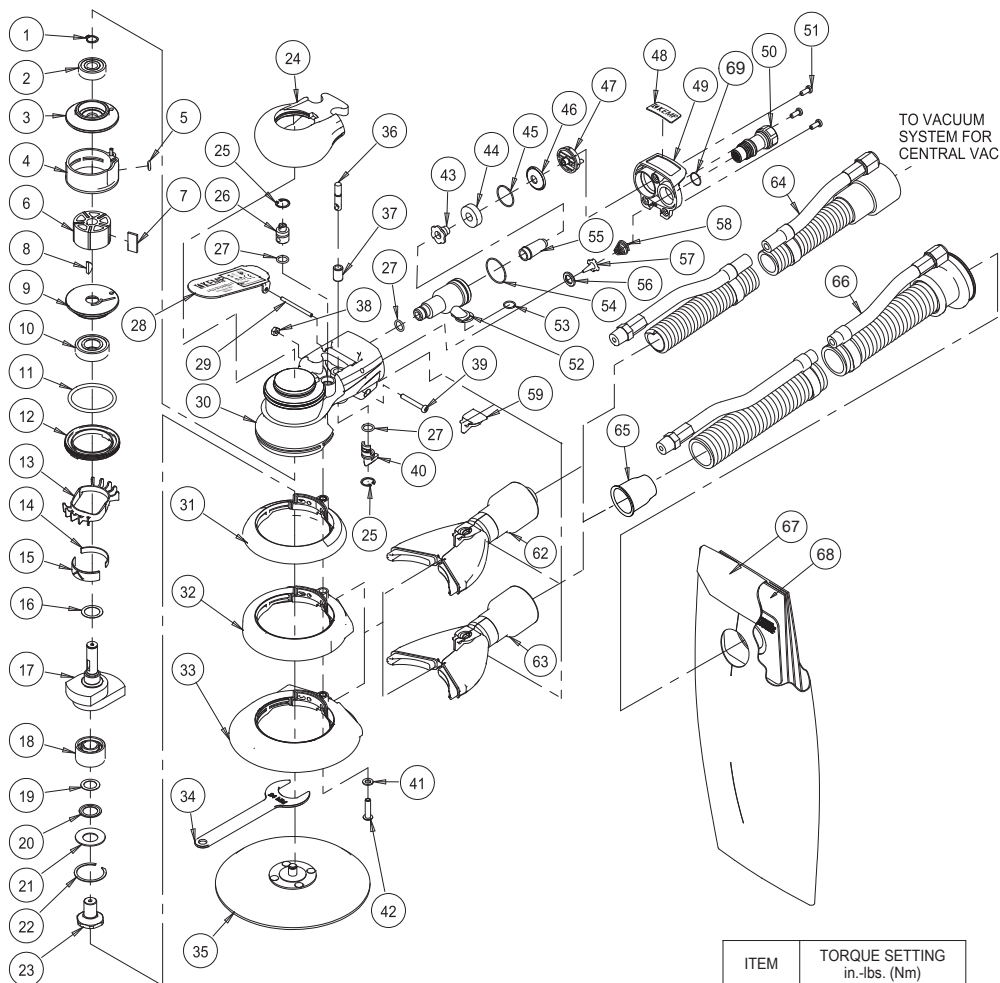
1/4" NPT (F)
3/8 in.

Features Include :

- **Variable Speed Control with Palm Style On/Off Lever**
- **Ergonomic Cushion-Grip for Comfort and Stability**
- **Low Profile for Control and Comfort**
- **Rear Exhaust Directs Air away**
- **Suggested Applications: Sanding and Finishing a Variety of Materials including Wood, Metal, Plastic, Fiberglass Composites, Solid Surfaces and other Sandable Surfaces**

Please Read and Comply With

- 1) General Industry Safety & Health Regulations, Part 1910, OSHA 2206, available from: Superintendent of Documents; Government Printing Office; Washington DC 20402
- 2) Safety Code for Portable Air Tools, ANSI B186.1 available from: American National Standards Institute, Inc.; 1430 Broadway; New York, NY 10018
- 3) State and Local Regulations.
- 4) **Key parts of the above regulations are excerpted below. They are not intended to be inclusive. Study and comply with all regulations.**
- 1) **TOOL INTENT** – Tool shall be used only for purposes intended in its design.
- 2) **AIR SUPPLY** – Test and operate tools at 90 PSIG (6.2 Bar) maximum unless tool is marked otherwise. Use recommended airline filters - regulators - lubricators (FRL).
- 3) **UNUSUAL SOUND or VIBRATION** – If tool vibrates or produces an unusual sound, repair immediately for correction.
- 4) **OPERATOR PROTECTIVE EQUIPMENT** – Wear goggles or face shield whenever tool is in operation. Other protective clothing shall be worn, if necessary. SEE REGULATIONS.
- 5) **SAFETY MAINTENANCE PROGRAM** – Employ a safety program to provide inspection and maintenance of all phases of tool operation and air supply equipment in accordance with "Safety Code for Portable Air Tools."



ITEM	TORQUE SETTING in.-lbs. (Nm)
12	55 - 65 (6.2 - 7.3)
16	30 - 35 (3.4 - 3.9)
42	26.0 (2.9)
51	8.7 (1.0)
57	16 - 20 (1.8 - 2.3)

A-FSG-O51-O25R120-N	A-FSG-O61-O25R120-N
A-FSG-O51-O50R120-N	A-FSG-O61-O50R120-N
A-FSG-O51-O80R120-N	A-FSG-O61-O80R120-N
A-FSG-O51-O25R120-C	A-FSG-O61-O25R120-C
A-FSG-O51-O50R120-C	A-FSG-O61-O50R120-C
A-FSG-O51-O80R120-C	A-FSG-O61-O80R120-C
A-FSG-O51-O25R120-S	A-FSG-O61-O25R120-S
A-FSG-O51-O50R120-S	A-FSG-O61-O50R120-S
A-FSG-O51-O80R120-S	A-FSG-O61-O80R120-S

Item No.	Part No.	Description	Qty.
1	150 05 501 001	EXTERNAL RETAINING RING	1
2	150 05 501 002	10 x 26 x 8 BEARING -2 SHIELDS	1
3	150 05 501 003	REAR END-PLATE	1
4	150 05 501 004	20 mm CYLINDER ASSEMBLY	1
5	150 05 501 005	5 mm x 2.0mm O-RING	1
6	150 05 501 006	MACHINED ROTOR	1
7	150 05 501 007	VANE	5
8	150 05 501 008	3mm x 13mm WOODRUFF KEY	1
9	150 05 501 009	FRONT END-PLATE	1
10	150 05 501 010	15 x 32 x 9 BEARING - 2 SHIELDS	1
11	150 05 501 011	39.4 mm x 3.1 mm O-RING	1
12	150 05 501 012	LOCK RING	1
13	150 05 501 013	COOLING FAN 5" / 6" X 3/32in. 3/16in.	OPT
13	150 05 501 213	COOLING FAN 5" X 5/16in.	OPT
13	150 05 501 313	COOLING FAN 6" X 5/16in.	OPT
14	150 05 501 014	SMALL SPACER-COOLING FAN 5" / 6" x 3/32in. 3/16in. 5/16in.	1
15	150 05 501 015	LARGE SPACER-COOLING FAN 5" / 6" x 3/32in. 3/16in.	OPT
15	150 05 501 215	LARGE SPACER-COOLING FAN 5" x 5/16in.	OPT
15	150 05 501 315	LARGE SPACER-COOLING FAN 6" x 5/16in.	OPT
16	150 05 501 016	FRONT BEARING DUST SHIELD	1
17	150 05 501 017	5 x 3/32 in. ORBIT NON-AirSHIELD Plus TM SHAFT BALANCER	OPT
17	150 05 501 217	5 x 3/16 in. ORBIT NON-AirSHIELD Plus TM SHAFT BALANCER	OPT
17	150 05 501 317	5 x 5/16 in. ORBIT NON-AirSHIELD Plus TM SHAFT BALANCER	OPT
17	150 05 501 417	6 x 3/32 in. ORBIT NON-AirSHIELD Plus TM SHAFT BALANCER	OPT
17	150 05 501 517	6 x 3/16 in. ORBIT NON-AirSHIELD Plus TM SHAFT BALANCER	OPT
17	150 05 501 617	6 x 5/16 in. ORBIT NON-AirSHIELD Plus TM SHAFT BALANCER	OPT
18	150 05 501 018	12 x 28 x 16 DOUBLE ROW ANGULAR CONTACT BEARING - 1 SEAL	1
19	150 05 501 019	SPACER 12.1 ID x 18.0 OD x 0.2 THK	1
20	150 05 501 020	SPINDLE BEARING DUST SHIELD	1
21	150 05 501 021	BELLEVILLE WASFER	1
22	150 05 501 022	RETAINING RING	1
23	150 05 501 023	SPINDLE	1
24	150 05 501 024	GRIP (75mm) BLACK	OPT
25	150 05 501 025	INTERNAL RETAINING RING	2
26	150 05 501 026	SPEED CONTROL (PRESET)	1
27	150 05 501 027	9 mm x 1.5 mm O-RING	3
28	150 05 501 028	THROTTLE LEVER 12,000 RPM 2.5 mm (3/32 in.) ORBIT SANDER (5in.)	OPT
28	150 05 501 228	THROTTLE LEVER 12,000 RPM 2.5 mm (3/32 in.) ORBIT SANDER (6in.)	OPT
28	150 05 501 328	THROTTLE LEVER 12,000 RPM 5.0 mm (3/16 in.) ORBIT SANDER (5in.)	OPT
28	150 05 501 428	THROTTLE LEVER 12,000 RPM 5.0 mm (3/16 in.) ORBIT SANDER (6in.)	OPT
28	150 05 501 528	THROTTLE LEVER 12,000 RPM 8.0 mm (5/16 in.) ORBIT SANDER (5in.)	OPT
28	150 05 501 628	THROTTLE LEVER 12,000 RPM 8.0 mm (5/16 in.) ORBIT SANDER (6in.)	OPT
29	150 05 501 029	LEVER SPRING PIN	1
30	150 05 501 030	MACHINED HOUSING	1
31	150 05 501 031	5in. / 6in. NON-VACUUM SHROUD	1
32	150 05 501 032	5 in. (C)(S) SHROUD	1
33	150 05 501 033	6 in. (C)(S) SHROUD	1
34	150 05 501 034	24 mm PAD WRENCH	1
35	ACCESSORIES	1 PAD SUPPLIED WITH EACH TOOL	OPT
36	150 05 501 036	VALVE STEM ASSEMBLY	1
37	150 05 501 037	VALVE SLEEVE	1
38	150 05 501 038	M4 NUT	1
39	150 05 501 039	HEX.SOCKET BUTTON HEAD SCREW (M4x30L)	1
40	150 05 501 040	SPEED CONTROL	1
41	150 05 501 041	PLAIN WASHER (M5x10L)	1
42	150 05 501 042	HEX. SOCKET BUTTON HEAD SCREW (M5x20L)	1
43	150 05 501 043	MUFFLER CAP	1
44	150 05 501 044	MUFFLER INSERT	1
45	150 05 501 045	O-RING (20 mm x 1 mm NBR70)	1
46	150 05 501 046	SELF VACUUM EXHAUST CAP	1
47	150 05 501 047	VARIABLE EXHAUST	1
48	NA	KEMP LOGO INSERT - END CAP	1
49	150 05 501 049	END CAP	1
50	150 05 501 050	INLET BUSHING ASSEMBLY	1
51	150 05 501 051	HEX.SOCKET BUTTON HEAD SCREW (M4x10L)	3
52	150 05 501 052	EXHSUST CHAMBER	1
53	150 05 501 053	9.5 mm x 1.0 mm O-RING	1
54	150 05 501 054	24 mm x 1.0 mm O-RING	1
55	150 05 501 055	INTERNAL MUFFLER	1
56	150 05 501 056	VALVE SEAT	1
57	150 05 501 057	VALVE	1
58	150 05 501 058	VALVE SPRING	1
59	150 05 501 059	NON-VACUUM COVER	1
62	150 05 501 062	5 in. S SWIVEL EXHAUST FITTING - 1 in./28mm HOST	OPT
62	150 05 501 262	6 in. S SWIVEL EXHAUST FITTING - 1 in./28mm HOST	OPT
63	150 05 501 063	5 in. C SWIVEL EXHAUST FITTING - 1 in./28mm HOST	OPT
63	150 05 501 263	6 in. C SWIVEL EXHAUST FITTING - 1 in./28mm HOST	OPT
64	150 05 501 064	Ø 1 in. VAC HOSE TO Ø 1 in./28 mm x 1 1/2 in. ADAPTER COUPLING AND AIRLINE ASSEMBLY	OPT
65	150 05 501 065	1 in./28 mm HOSE SEAL	1
66	150 05 501 066	Ø 1 in. VAC HOSE TO DOUBLE BAG FITTING AND AIRLINE ASSEMBLY	OPT
67	150 05 501 067	VACUUM BAG	1
68	150 05 501 068	VACUUM BAG INSERT	1
69	150 05 501 069	14.0x1.5 O-RING	1

Proper Use of the Tool

This sander is designed for sanding all types of materials i.e. metals, wood, stone, plastics, etc. using abrasive designed for this purpose. Do not use this sander for any other purpose than that specified without consulting the manufacturer or the manufacturer's authorized supplier. Do not use back-up pads that have a working speed less than 12,000 RPM free speed.

Work Stations

The tool is intended to be operated as a hand held tool. It is always recommended that the tool be used when standing on a solid floor. It can be in any position but before any such use, the operator must be in a secure position having a firm grip and footing and be aware that the sander can develop a torque reaction. See the section "Operating Instructions".

Putting the Tool into Service

Use a clean lubricated air supply that will give a measured air pressure at the tool of 90 psig (6.2 bar) when the tool is running with the lever fully depressed. It is recommended to use an approved 3/8 in. (10 mm) x 25 ft (8 m) maximum length airline. It is recommended that the tool be connected to the air supply as shown in Figure 1.

Do not connect the tool to the airline system without incorporating an easy to reach and operate air shut off valve. The air supply should be lubricated. It is strongly recommended that an air filter, regulator and lubricator (FRL) be used as shown in Figure 1 as this will supply clean, lubricated air at the correct pressure to the tool. Details of such equipment can be obtained from your supplier. If such equipment is not used then the tool should be manually lubricated by shutting off the air supply to the tool, depressurizing the line by pressing the lever on the tool. Disconnecting the airline and putting 2 to 3 drops of suitable pneumatic motor lubricating oil, preferably incorporating a rust inhibitor into the hose end (inlet) of the machine. Reconnect tool to air supply and run tool slowly for a few seconds to allow air to circulate the oil. If tool is used frequently lubricate on daily basis and if tool starts to slow or lose power. It is recommended that the air pressure at the tool be 90 PSI (6.2 Bar) while the tool is running so the maximum RPM is not exceeded. The tool can be run at lower pressures but should never be run higher than 90 PSI (6.2 Bar). If run at lower pressure the performance of the tool is reduced.

Operating Instructions

- 1) Read all instructions before using this tool. All operators must be fully trained in its use and aware of these safety rules. All service and repair must be carried out by trained personnel.
- 2) Make sure the tool is disconnected from the air supply. Select a suitable abrasive and secure it to the back-up pad. Be careful and center the abrasive on the back-up pad.

- 3) Always wear required safety equipment when using this tool.
- 4) When sanding always place the tool on the work then start the tool. Always remove the tool from the work before stopping. This will prevent gouging of the work due to excess speed of the abrasive.
- 5) Always remove the air supply to the sander before fitting, adjusting or removing the abrasive or back-up pad.
- 6) Always adopt a firm footing and/or position and be aware of torque reaction developed by the sander.
- 7) Use only correct spare parts.
- 8) Always ensure that the material to be sanded is firmly fixed to prevent its movement.
- 9) Check hose and fittings regularly for wear. Do not carry the tool by its hose; always be careful to prevent the tool from being started when carrying the tool with the air supply connected.
- 10) Dust can be highly combustible. Vacuum dust collection bag should be cleaned or replaced daily. Cleaning or replacing of bag also assures optimum performance.
- 11) Do not exceed maximum recommended air pressure. Use safety equipment as recommended.
- 12) The tool is not electrically insulated. Do not use where there is a possibility of coming into contact with live electricity, gas pipes, water pipes, etc. Check the area of operation before operation.
- 13) Take care to avoid entanglement with the moving parts of the tool with clothing, ties, hair, cleaning rags, etc. If entangled, it will cause the body to be pulled towards the work and moving parts of the machine and can be very dangerous.
- 14) Keep hands clear of the spinning pad during use.
- 15) If the tool appears to malfunction, remove from use immediately and arrange for service and repair.
- 16) Do not allow the tool to free speed without taking precautions to protect any persons or objects from the loss of the abrasive or pad.

